6.0 HAZARDOUS WASTE CONTINGENCY PLAN

The Hazardous Waste Contingency Plan (HWCP) adopts the ATK Launch Systems Management Policy SC-E, "Emergency Action Planning (EAP)," which directs emergency response actions at the Facility. The HWCP adopts those portions of the EAP that deal with general responses to fires, explosions, or releases of hazardous waste, constituents or substances as defined by R315-2 UAC or 40 CFR 303.3 in all areas of the plant. These general responses will be referred to as "environmental emergencies." The HWCP also contains emergency equipment lists and evacuation plans for hazardous waste facilities.

6.1 GENERAL INFORMATION

The HWCP is designed to minimize the hazards to human health and the environment in the event of an uncontrolled, unplanned, sudden, or non-sudden fire, explosion, release of hazardous materials or hazardous waste to the air, soil, or surface water.

6.1.1 Site Location

The site occupies approximately 10,000 acres in West Valley City and unincorporated Salt Lake County. The main gate entrance is located at approximately 5000 South on Highway 111 (8400 West). The site includes contiguous locations commonly referred to as Plant 1, Bacchus West, and NIROP. This plan also applies to off-site groundwater monitoring wells classified as large quantity generators.

6.1.2 Ownership

The ATK-Bacchus is owned and operated by ATK Launch Systems Inc., which is owned by Alliant Techsystems Incorporated located in Edina, Minnesota. NIROP is owned by the United States Navy and operated by ATK Launch Systems. A large portion of Bacchus West is leased from Kennecott Utah Copper Corporation. The telephone contact for the Alliant Techsystems Corporate Environmental Offices is: (952) 351-2871. The telephone contact for the local office of the Launch Systems President is (800) 453-9142.

6.1.3 Operations

Operations at ATK-Bacchus include, but are not limited to the following:

- Production of nitroglycerin
- Manufacture of rocket motor propellant
- Assembly of rocket motors
- Static testing of propellants
- Production of composite products
- Support, administration, and maintenance of facilities
- Storage of chemical and explosive hazardous wastes incidental to the manufacture of rocket motors.

Explosive and chemical hazardous wastes are generated during the manufacturing process and are treated or stored at the hazardous waste facilities. Facilities located on Plant 1 include HS-1, ES-1, Segment Storage and RH-1. Facilities located on NIROP include the NIROP Burning Grounds, ES-2 and the Burning Ground Ash Storage Pad.

In order to provide a complete description of emergency procedures for the ATK-Bacchus facilities, the treatment and storage facilities located on NIROP will be included in this application. However, permit application information for facilities location on NIROP will be submitted on a separate application.

Hazardous waste chemicals and explosives are stored on site at one of the hazardous waste storage areas identified in Section 2 and 4 of this application or at one of the NIROP units identified above prior to being treated or shipped off site for disposal.

6.1.4 Site Plan

The topographic map (Figure 2-5.17) shows the plant site layout, and the location of key hazardous waste facilities.

6.2 EMERGENCY COORDINATOR

The Emergency Coordinator is the ATK Fire Department Captain. The alternate Emergency Coordinators are the ATK Fire Department Shift Lieutenants. Either the Emergency Coordinator or an alternate Emergency Coordinator is on plant at all times. In this plan the Emergency Coordinator will be referred to as the Incident Commander (IC). The incumbent IC and alternates are:

Incident Commander	Alternate	Alternate	Alternate
Steven Winn (H)282-2543 (Cell) 699-2473 (W) 251-2175	Dee Madsen (H) 254-6014 (W) 651-2541	Jon E. Winters (H) 525-7079 (W) 251-2541	Steve Osborne (H)254-1430 (W) 251-1430

6.2.1 Duties and Responsibilities

The IC and the alternate IC are professional fire fighters certified by the State of Utah to no less than a Fire Fighter II level, and are trained to OSHA 29 CFR 1910.120 requirements. They have also received extensive training in responding to emergencies that could occur at the facility. The Fire Department is a full-time professional fire service organization on site 24-hours a day 365-days per year.

The ATK Fire Department has the responsibility for initial response, site assessment, site direction and control, communications, emergency medical treatment, rescue and evacuation, and site stabilization for all emergencies at the Facility. In an emergency, the IC is responsible for managing the emergency in accordance with established Fire Service procedures, and notifying the appropriate management personnel.

6.2.2 Authorization

The IC is authorized to commit equipment or other resources necessary to implement the provisions of the HWCP.

6.3 IMPLEMENTATION

A report (see Section 6.8) on the implementation of the HWCP will be submitted to the appropriate regulatory agency along with the Utah Division of Solid and Hazardous Waste whenever any of the following events occur:

- A reportable release of a hazardous waste, a material which when spilled becomes a hazardous waste, constituents or substances per R315-9-1 UAC or 40 CFR Table 302.4 List of Hazardous Substances.
- An unplanned fire or explosion in any manufacturing, maintenance, storage, or hazardous waste management facility.
- Accidental or unplanned ignition at the NIROP Burning Grounds.
- Accidental or unplanned grass fire associated with production, manufacturing or disposal operations or a grass fire that threatens explosive or chemical storage facilities.
- Waste propelled or ejected out of the NIROP Burning Grounds during open burning operations.

Controlled fires, such as routine open burning of waste propellant at the NIROP Burning Ground and propellant burn-rate tests conducted incidental to our manufacturing operations, will be excluded from reporting requirements of section 6.8. Operations associated with testing of propellant, routine Pit 38 operations, and process equipment decontamination will also be excluded from reporting requirements.

6.4 EMERGENCY ACTIONS

6.4.1 Emergency Reporting Procedure

Any employee who witnesses a fire, explosion, or other significant release of hazardous materials or hazardous waste to the environment will report the event on by telephone on extension. 22222, and supply the following information:

- Caller's name
- Caller's location
- Type of emergency

If possible, the caller will stay by the telephone to supply additional information as needed; if safety considerations require a move to another location, the caller will move and repeat the above steps.

An emergency reported using the above procedures will result in the notification of the employees listed below:

- IC (Fire Station)
- Plant medical staff
- Radio Dispatcher
- Industrial Safety Manager
- Security Manager
- Plant Manager

During normal working hours these employees identified above are automatically notified of an environmental emergency. During off-shifts, these individuals are contacted by the IC or his/her designee.

Notification of Federal, State, and Local Authorities

If the IC determines that assistance is required from the West Valley City or Salt Lake County Unified Fire Authority, Emergency Services (911) will be contacted immediately. The Emergency Services number automatically notifies the Local Emergency Planning Committee for both West Valley City and Salt Lake County

When an environmental emergency results in the release of a reportable quantity of hazardous waste, constituents or substances the appropriate Federal and State authorities will be notified immediately. The IC delegates the responsibility of notifying Federal and State authorities to the ATK-Bacchus Manager of Environmental Compliance. The IC is responsible for making the notification if the ATK-Bacchus Manager of Environmental Compliance cannot be notified in a timely manner.

The ATK-Bacchus Manager of Environmental Compliance or IC will notify the proper authority according to the following conditions:

- For releases per the State of Utah Hazardous Waste Management Rules 315-9-1, contact the Utah Division of Environmental Response and Remediation, 168 North 1950 West Salt Lake City, Utah 84116; emergency number: 536-4123 or 1-800-572-6400; business number: 536-4100; and the Utah Division of Solid and Hazardous Waste, 288 North 1460 West Salt Lake City, Utah 84114; business number: 538-6170.
- For releases per 40 CFR Table 302.4 List of Hazardous Substances and Reportable Quantities or 49 CFR 172.101 Table 1- Hazardous Substances Other Than Radionuclides, contact the National Response Center 1-800-424-8802 and the State agencies listed above.

The following information will be provided when reporting releases:

- Name, phone number, and address of responsible party or company
- Name, title, and phone number of person reporting
- Time and date of spill/release
- Location of spill/release, as specific as possible
- Kind and amount of material
- Cause of spill/release
- Waterways involved or proximity to waterways
- Emergency action taken for containment and clean-up
- Other agencies contacted

6.4.2 Identification of Hazardous Waste, Constituents or Substances

The IC will identify the hazardous wastes, constituents or substances involved, and provide an approximation of the amount of material that was released. This will be done using observation, discussing the issue with knowledgeable individuals, reviewing of records for the operation or facility, and if necessary, by chemical analysis. The IC may call upon Industrial Safety and Hygiene or Environmental Services employees to assist with identification.

If a material cannot be immediately identified by a container label, operator knowledge or another convenient method, field characteristic tests may be conducted, as needed, to identify the immediate hazards, and may include:

- pH test
- Water reactivity
- Ignitability
- Oxidizer test
- Organic vapors

Field characteristic testing will permit safe handing while samples are collected and analyzed. Samples will be collected and analyzed as required in the Waste Analysis Plan to assure proper dispose of the waste.

6.4.3 Assessment Criteria

The IC will assess all possible threats to human health or the environment as soon as possible after an environmental emergency is reported. The purpose of the assessment is to evaluate potential hazards to the employees responding to the environmental emergency, and the potential for affecting off-site populations. To conduct the assessment, the IC may call upon Industrial Safety and Hygiene or Environmental Services employees to assist.

In the event of an environmental emergency, the human health and environmental assessment criteria will include the following:

- Fire or explosion hazards
- Corrosive material hazards
- Toxic substance hazards
- Potential for off-site releases
- Containment of spill
- Water contamination
- Air contamination
- Hazard isolation requirements

6.4.4 Control Procedure Guidelines

Upon arriving at the scene the IC will identify the nature of the emergency. Standard Fire Service protocol will be followed for each type of emergency. Assistance from West Valley City or the Salt Lake County Unified Fire Authority may be requested by the IC depending on the scope of the emergency. Injured personnel will be immediately evacuated for medical care and non-injured personnel will be removed from immediate hazard exposure at the scene of the incident. Managers of the affected area along with the General Management Team (GMT), and support personnel (e.g. health, safety, environmental, public relations, etc.) will be notified. The management of the affected area and the GMT will gather in the Emergency Operations Center to provide support and direction during the emergency. The ATK Fire Department will then secure a perimeter at a sufficient distance from the source to prevent further injury to facility personnel.

The ATK Fire Department will initiate containment, control or suppression activities as directed by internal procedures or standard Fire Service protocol. Because of varied and highly sensitive materials and processes within the facility boundaries, the IC or other designated employees will escort outside emergency response units or individuals during all on-site operations.

6.4.4.1 Fires/Explosions

In the event of a fire or explosion the ATK Fire Department will apply appropriate fire fighting procedures to prevent the spread of fire to adjoining buildings and property.

6.4.4.2 Release of Hazardous Wastes, Constituents or Substances

If an emergency involves a release of a hazardous wastes, constituents or substances, the Fire Department will provide the initial response, and conduct containment activities. The Manager of Environmental Compliance is responsible for managing the clean up of releases of hazardous wastes, constituents or substances after they have been contained by the Fire Department.

Spills involving explosive and non-explosive hazardous wastes, constituents or substances will generally be cleaned up by production employees who work in the area where the spill occurs as long as they have adequate training and protective equipment to meet the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements.

Spills of non-explosive hazardous wastes, constituents or substances that can not be cleaned up by production employees will be referred to a contractor with adequate training and equipment to safely complete the job.

Spills of explosive hazardous wastes, constituents or substances will be cleaned up by ATK-Bacchus employees unless a contractor has documented experience working with explosives.

6.4.4.3 Natural Disaster

The ATK Fire Department will respond to natural disasters such as earthquakes and severe weather conditions in the same manner as fires, explosions, and releases of hazardous waste, constituents or substances. Injured personnel will be treated, damaged facilities will be evaluated, and actions taken to minimize the scope of the emergency.

6.4.5 Prevention of Recurrence or Spread of Fires, Explosions or Releases

During an environmental emergency, the IC will take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, reoccur, or spread to other facilities.

6.4.6 Storage and Treatment of Released Material

Following an environmental emergency, the recovered waste, contaminated soil, surface water, and decontamination water will be stored on site at one of the permitted facilities. The recovered material will be handled and managed as a hazardous waste unless it is determined to be non-hazardous.

6.4.7 Incompatible Waste

Incompatible waste generated during an environmental emergency will be managed as directed in Section 4.4.1.

6.4.8 Post-Emergency Equipment Maintenance

Equipment used in an emergency response will be disposed as required by regulation, or cleaned, visually inspected and returned to its storage location. Due to the nature of the materials used at decontamination, decontamination wastes will be managed as hazardous waste until they are analyzed and characterized in accordance with Section 3. All supplies, listed in Tables 6.1, 6.2 and 6.3, used during an emergency response event will be replaced within 5 working days of the completing the emergency response event. The equipment listed in Table 6.4 will be replaced before operations at the NIROP Burning Grounds resume.

6.4.9 Container Spills and Leakage

Container spills and leaks will be responded to as described in Section 6.4.4.2,"Release of Hazardous Wastes, Constituents, or Substances." The protocol for responding to container spills and leaks are:

(1) Identify the contents of the container
(2) Move the container so the leak is above the liquid level
(3) Apply a temporary seal to the leak using putty or a wooden plug
(4) Overpack the drum or pump the contents to a new container.

Spilled materials will be absorbed, neutralized or pumped as required and the area impacted by the spill will be decontaminated. Absorbent and cleanup materials, including disposable equipment, will be collected for disposal in accordance with the applicable waste management rules.

6.4.10 Open Burning/Open Detonation Emergency

An emergency involving an open burn or detonation at an explosive manufacturing, product or waste handling facility, or at an explosive waste treatment facility requires an immediate response from the operator of the unit or facility. Safety of personnel is always the primary concern. Potential emergency circumstances include, but are not limited to the following: (a) the unplanned initiation of wastes on a burn pan, (b) explosions, (c) fire in or near one of these facilities, or (d) a natural disasters.

The operator of the unit or facility will immediately report unplanned initiation or other fire through the plant emergency phone number. Immediate actions will be taken to remove injured personnel from the area, but only when it is safe to enter the area. A fire blanket, chemical fire extinguisher, and water supplies (hydrant and hose) are available for extinguishing burning clothing. First-aid should be administered to any injured persons prior to the arrival of the ATK Fire Department. In no instance will attempts be made to extinguish burning materials on a burn pan or at any of the other explosive facilities.

The Burning Grounds are located outside the 100-year flood plain of Coon Creek. ATK-Bacchus has installed diversion ditches and berms around the perimeter of the Burning Grounds to manage and divert floodwater away from the Burning Grounds. If the facility should become immersed in floodwater, operations will cease until the area is cleared.

6.4.11 Review and Revision of Plan

The ATK-Bacchus Manager of Environmental Compliance will review the HWCP annually and, if necessary, amend the HWCP. The HWCP will also be amended whenever any of the following conditions exist:

- The HWCP fails in an emergency
- The permit is revised
- There is a significant changes in the facility's design, construction, and maintenance
- Change in ICs
- Changes in emergency equipment are made
- Hazardous Waste Management regulations are amended with regard to contingency planning

6.5 EMERGENCY EQUIPMENT

Each of the hazardous waste management units has emergency response equipment, which is described in Tables 6.1 through 6.4. Where appropriate, the equipment capabilities are detailed. The emergency response equipment is stored at the location indicated on the Tables. All of this emergency equipment can be transported and used at any location as required. Emergency vehicles are available around-the-clock, including weekends and holidays.

Emergency equipment inspection frequency and requirements are described in Section 5, "Procedures to Prevent Hazards." The Maintenance Department conducts preventative maintenance inspections, quarterly on sprinkler and deluge systems in hazardous waste management areas. Fire hydrants are located strategically throughout the plant. The Fire Department personnel tests fire hydrants annually to ensure they are in proper working order.

TABLE 6.1 EMERGENCY RESPONSE EQUIPMENT LOCATED AT HS-1	
Physical Description	**Outline of Capabilities**
Absorbent material	Material for absorbing liquids
Barricade tape	Barricade marker for designating exclusion zone
Boots (disposable)	Chemical resistant over boots
Drum repair kit	Assorted devices including plugs, screws, dowels and tape for temporary repairs to leaking drums
Coveralls (disposable)	All purpose coveralls that repel most liquids and particulates from incidental contact; for level C and level D response
Face shield	Provides face protection against incidental contact from chemical splashes (2)
Fire extinguisher	3 Hand-held, ABC-class extinguishing agent
Goggles	Eye protection complying with ANSI Z87.1-19898 requirements
Gloves (chemical protective)	Gloves manufactured from various types of chemical resistant material which may include neoprene, viton, nitrile, leather, kevlar mesh, PVC or equivalent
Mercury spill kit	Contains various devices to absorb or aspirate mercury
Neutralizing media (for acids)	Commercial neutralizing and absorbing media
Neutralizing media (for bases)	Commercial neutralizing absorbing media
pH paper	Provides a quick and accurate determination of acid/base; measure pH from 0-14
Shovel (non-sparking)	Non-sparking shovel for cleaning up flammable materials
Telephone	Explosion-proof telephone with a push button dial.

TABLE 6.2 EMERGENCY RESPONSE EQUIPMENT LOCATED AT ES-1 AND ES-2	
Physical Description	**Outline of Capabilities**
Telephone	Explosion-proof telephone with a push button dial.
Fire extinguisher	Hand-held, ABC-class extinguishing agent; various manufacturers

Decontamination and cleanup equipment from Table 6.1 will be transported to ES-1 or ES-2 as required.

TABLE 6.3 EMERGENCY RESPONSE EQUIPMENT LOCATED AT RH-1	
Physical Description	**Outline of Capabilities**
Telephone	Explosion-proof telephone with a push button dial
Fire Extinguisher	Hand-held, ABC-class extinguishing agent; various manufacturers

Decontamination and cleanup equipment from Table 6.1 will be transported to RH-1 as required.

TABLE 6.4.
EMERGENCY RESPONSE EQUIPMENT LOCATED AT THE NIROP BURNING GROUNDS

Physical Description	Outline of Capabilities
Fire blankets	MSA, 62 in. x 82 in. flame retardant wool blanket stored in a metal case or equivalent (3)
Fire extinguisher	Hand-held, ABC-class extinguishing agent (1-20#)
Telephone	Explosion-proof telephone with a push button dial
Stretcher	MSA, basket type litter with wire netting reinforced with iron braces or equivalent (1)

Decontamination and cleanup equipment from Table 6.1 will be transported to the NIROP Burning Grounds, as required.

TABLE 6.5

EMERGENCY RESPONSE EQUIPMENT LOCATED AT BLDG 8228

Physical Description	Outline of Capabilities
Fire truck (VN#3124)	1250 GPM pumper with associated fire fighting equipment.
Fire truck (VN#80302)	200 GPM pumper for brush fires with assorted fire fighting equipment.
Fire truck (VN#3579)	200 GPM pumper for brush fires with assorted fire fighting equipment.
Ambulance (VN#80102)	Fully equipped with life support systems and protective equipment.
Emergency Response Trailer (VN#3620	Includes absorbent materials, barricade stands and tape, boots, face shields, goggles, protective gloves and clothing, respirators, tools, etc

6.6 COORDINATION AGREEMENTS

Agreements for fire fighting assistance are maintained with West Valley City, the Salt Lake County Unified Fire Authority and the ATK Fire Department. The Battalion Chiefs from the assisting fire departments will act as liaisons between the IC and the assisting fire departments. The assisting fire departments will report to the appropriate security gate and will wait for an escort to the emergency scene.

A good working arrangement is maintained between ATK Security Management personnel, West Valley City Police, and the Salt Lake County Sheriff's Departments. If additional law enforcement personnel are required, their assistance will be requested. ATK personnel will escort outside law enforcement personnel at all times to avoid possible dangers due to the nature of our

operations.

A copy of the HWCP will be submitted to the Salt Lake County Local Emergency Planning Commission (LEPC), West Valley City LEPC, West Valley City Fire Department, Salt Lake County Unified Fire Authority and Pioneer Valley Hospital. The Salt Lake County Sheriff's Department and West Valley City Police Department have both requested that emergency information be communicated and coordinated through their respective LEPC.

Salt Lake County LEPC has jurisdiction for an off-site release from the Bacchus West portion of ATK-Bacchus, and West Valley City LEPC has jurisdiction for an off-site release from the remainder of the ATK-Bacchus facility. ATK-Bacchus will notify the 911 operator if the off-site release requires LEPC response. If LEPC response is requested, the appropriate fire department will then become the IC for off-site operations, and will direct city or county personnel.

6.7 EVACUATION PLAN

The emergency evacuation plan is implemented for each facility in the event of an emergency. Each facility has an individual evacuation plan. Employees evacuate a building if the fire alarm sounds or if they are verbally instructed to do so. Once outside, employees assemble at a predetermined meeting area away from the affected building and account for all employees assigned to the affected building. The evacuation routes and assembly areas for HS-1, NIROP Burning Ground, ES-1, ES-2, Segment Storage, and RH-1 are shown on Figures 6.7-1 through 6.7-6, respectively.

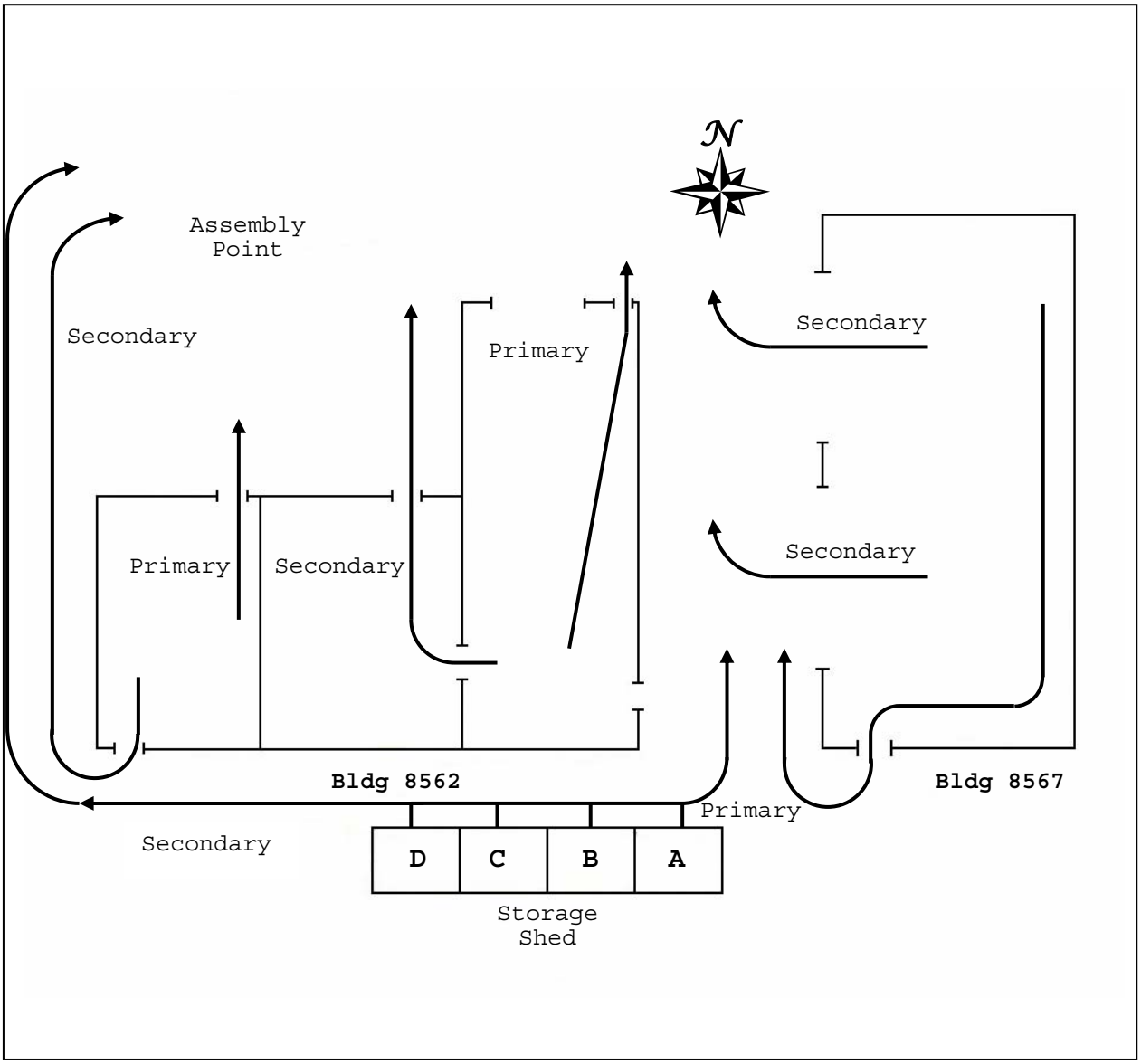

Figure 6.7-1 HS-1 Evacuation Plan

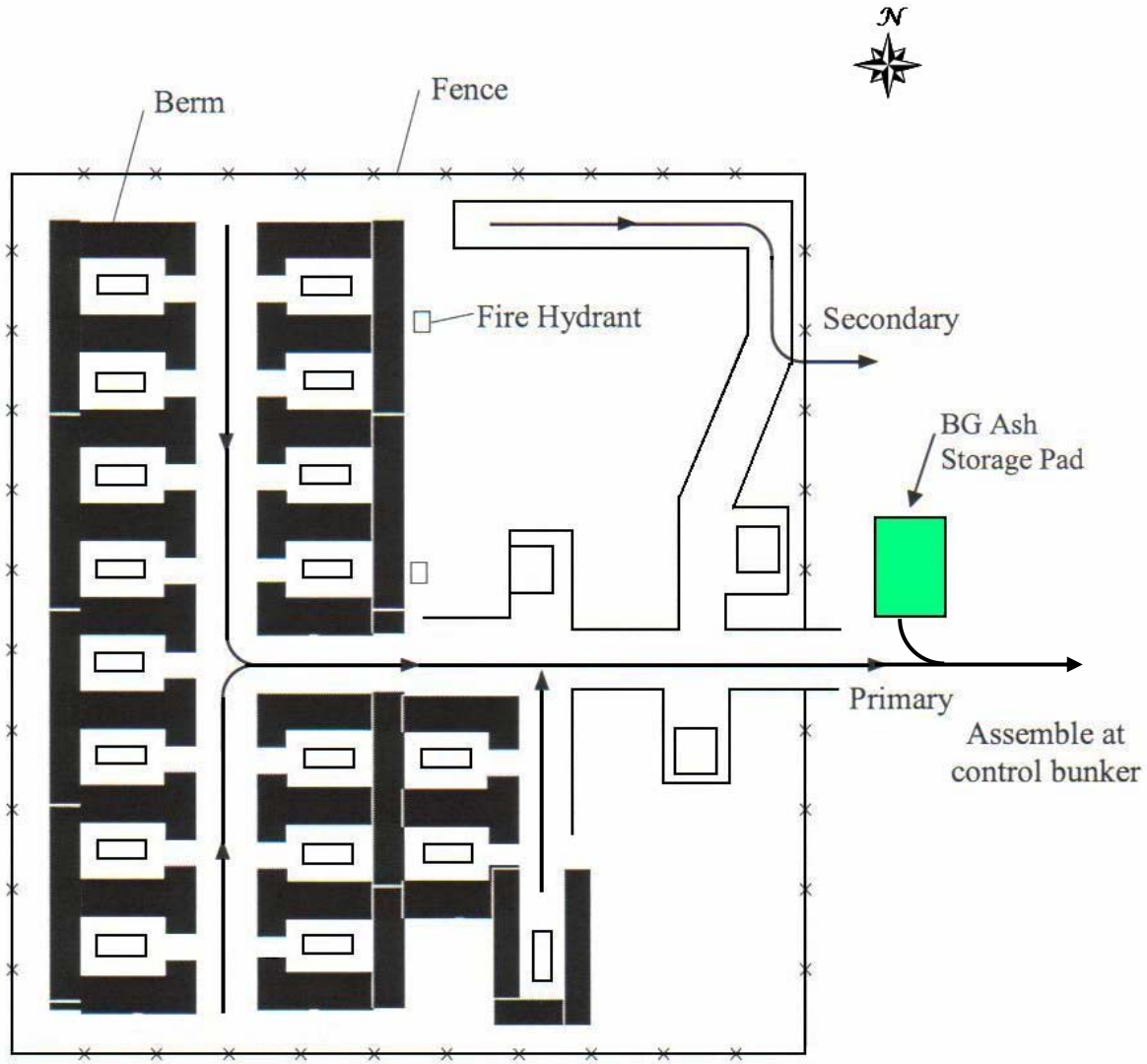

Figure 6.7-2. NIROP Burning Grounds Evacuation Plan

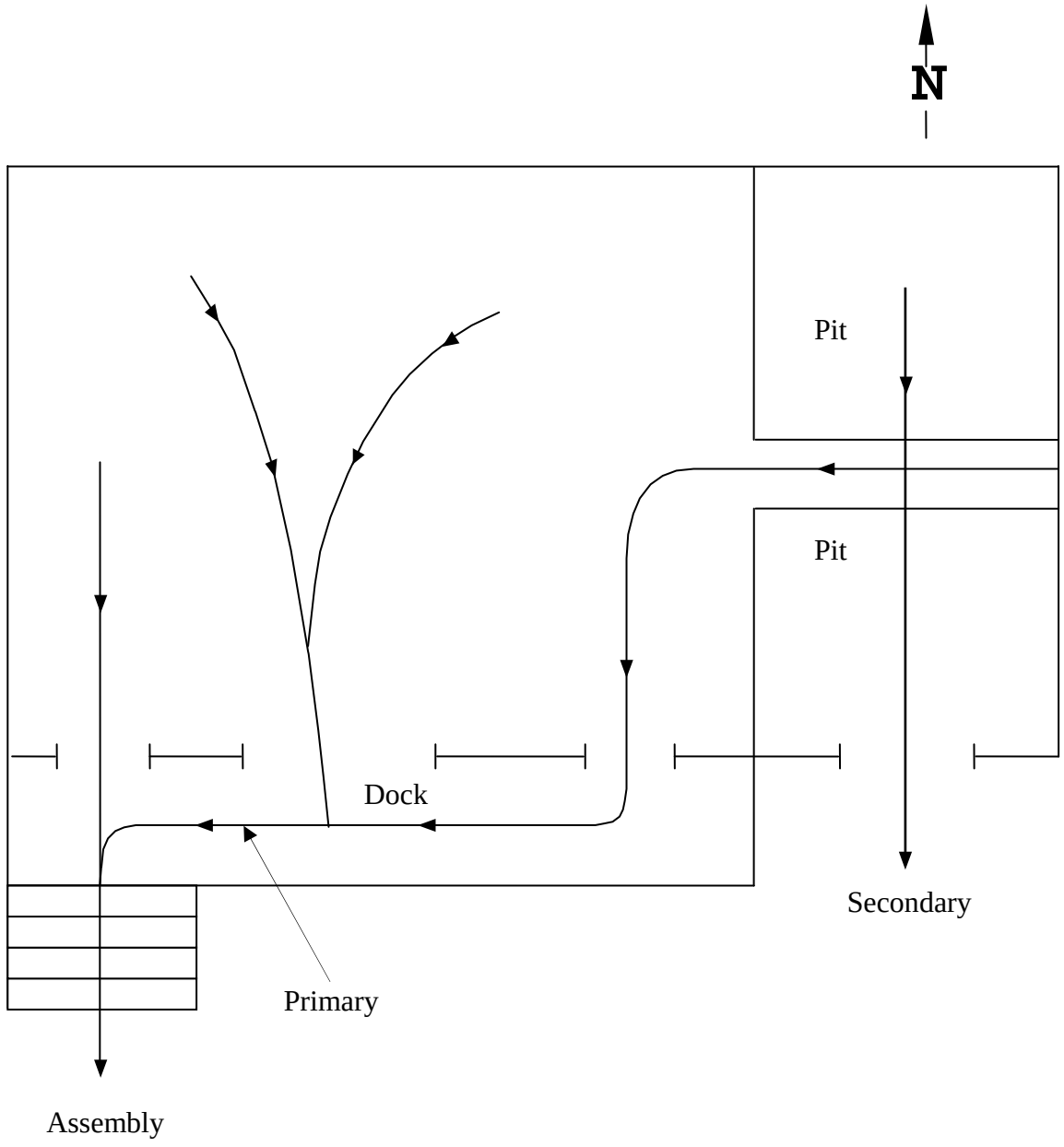

Figure 6.7-3. ES-1 Evacuation Plan

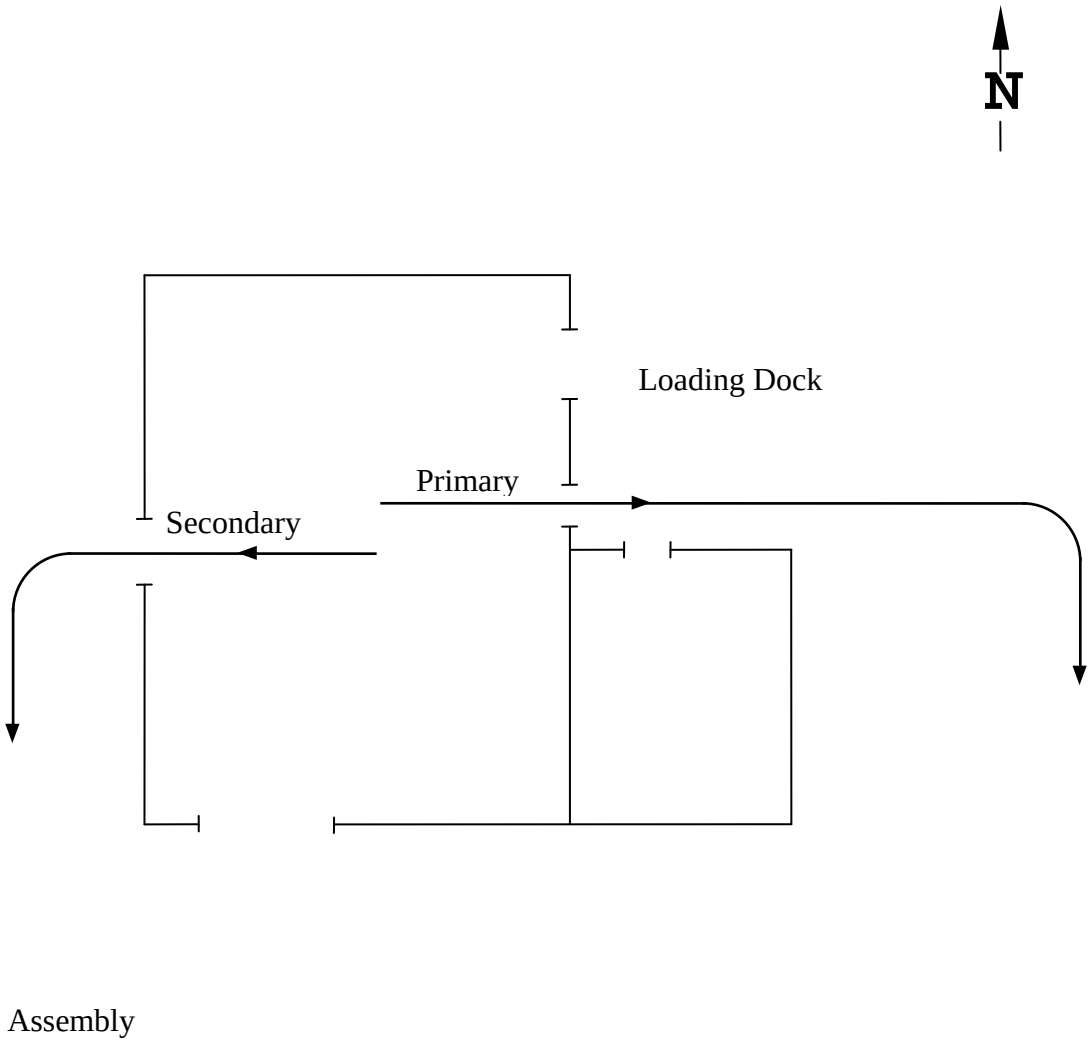

Figure 6.7-4. ES-2 Evacuation Plan

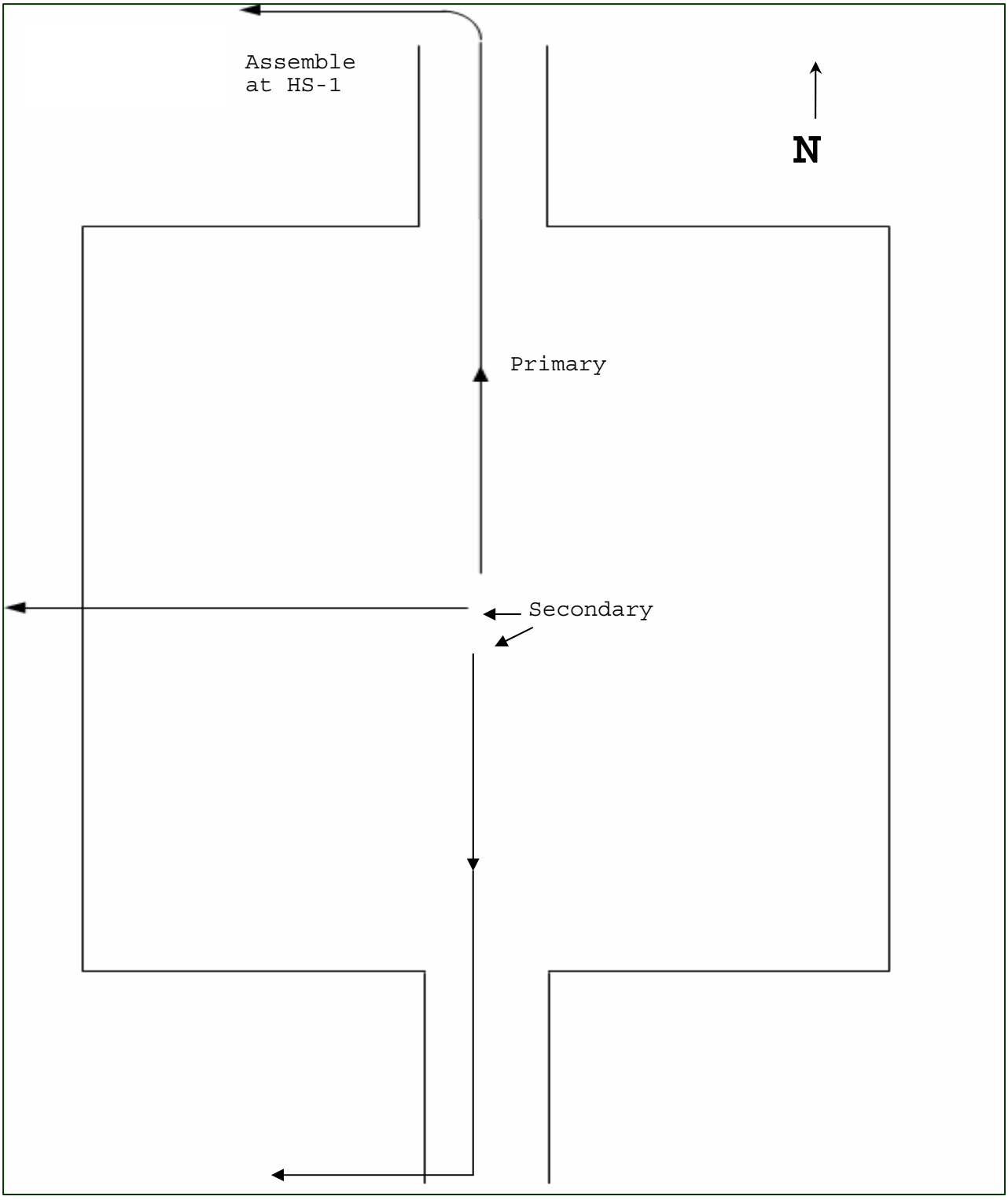

Figure 6.7-5. Segment Storage Pad Evacuation Plan

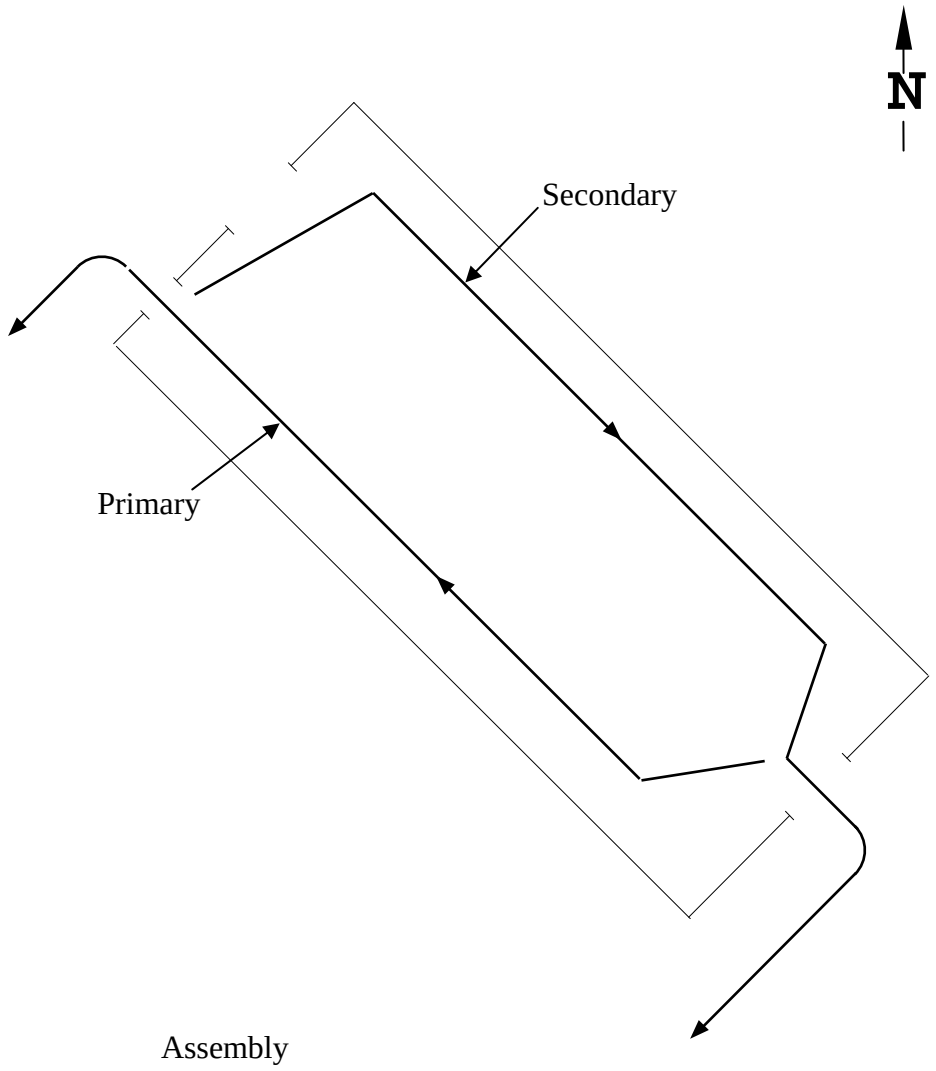

Figure 6.7-6. RH-1 Evacuation Plan

6.8 REQUIRED REPORTS

Written reports will be submitted as required in Section 6.3 within 15 days of an occurrence of an environmental emergency that requires reporting. The report will contain the following information:

- Name, address, and telephone number of the owner, operator, and facility
- Date of incident
- Time of incident
- Type of incident
- Materials involved
- Quantity of materials involved
- Extent of injuries (if any)
- Assessment of actual or potential hazards to human health or the environment
- Estimated quantity of recovered material
- Arrangements for disposition of recovered material

A copy of the report will always be sent to the Director of Division of Solid and Hazardous Waste, in addition to the agency requiring the report.